SNC Reference Number
(enter if previously assigned)

PROJECT SUMMARY

County: Placer

Applicant: Serene Lakes Donner Summit Conservation Association (SLDSCA)

Project Title: Study of Donner Summit Region Watershed

PROJECT GOAL

The goal of the project is to establish a reliable baseline and monitor changes in the watershed caused by climate change, land use decisions and increased water usage on the fragile alpine Donner Summit area.

PROJECT SCOPE

The research will help to track future trends in hydrologic conditions and facilitate implementation of environmentally sound policies thus optimizing future land and water use decisions. Tasks include: 1) water sampling to determine the health of Serene, Palisade and Kilborn Lakes, 2) temperature logging of these lakes, 3) determining the characterizations and hydrologic connections of water resources on Donner Summit, 4) well data analysis at Palisades, Pahatsi Boy Scouts Camp, and Sierra Lakes County Water District, 5) inventory at Palisades Springs, 6) collection of data to determine sediment loading of streams, 7) analysis of all testing and monitoring data.
The grant will fund contracts with a USGS Hydrologist, UNR Limnologist and an independent Hydrologist for technical interpretation of data and production of a final report. A hydrologic model will be created and a final report of unbiased historical information will be issued for wide use by the public and agencies managing water resources and developing watershed management plans. Project management will be performed by an experienced grants coordinator and compliance/accountability reporter, and a citizen volunteer who has coordinated services with the technical consultants and has overseen similar studies.

LETTERS OF SUPPORT

Letters of support are from: the Golden Empire Council Boy Scouts of America; US Forest Service, Truckee office, and Friends of the North Fork American River Association. Resolutions are from: Sierra Lakes County Water District; Donner Summit Public Utility District; Donner Summit Area Association; Serene Lakes Property Owners Association, and The Palisades.

SNC PROJECT DELIVERABLES AND SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
INCLUDE SPECIFIC TASKS IDENTIFIED IN SCOPE AND ALL REPORTS, ETC.	ASSUME START DATE 60 DAYS AFTER SNC BOARD AUTHORIZATION
First Invoice to be submitted to start project	March 2009
Monitoring devices and other equipment will be purchased□□□□□	April/May 2009

Lake Testing will include turbidity, particulate size, conductivity, temperature, oxygen profile, nutrient (nitrogen and phosphorus) and clarity indicators, algal biomass via chlorophyll measurements, nutrient limitation bioassay, zooplankton using Secchi Disc readings□□□□□	Monthly testing May - October 2009
Stream monitoring will include turbidity, conductivity, temperature, dissolved oxygen, nutrients (nitrogen and Phosphorus), and particulate size□□□□□	May-mid-July 2009 until streams no longer flow.
Groundwater study will include monitoring 6 test wells, measuring, recording and processing groundwater levels by monthly calibrations and data downloading. Temperature and specific conductivity will be measured**.**□□□□□	Monthly site visits May - October 2009, and May - October 2010. Winter visits will be less frequent**.**
Palisades Spring will be measured, recording and processing flow and temperature data□□□□□	Monthly site visits May-October 2009, May-October 2010
Historic records and data will be retrieved from CDEC, Sierra Snow Lab and/or NWIS and analyzed from local snow courses and snow-pillow sites□□□□□	April-June 2009, April-June 2010
Progress Payment Invoices to be submitted for work completed during billing period	July 2009, Nov. 2009, July 2010, Nov. 2010
Well data analysis will include depth dependent variables, lithologic information, production rates, specific capacities□□□□□	Complete by October 2010
Make hydrogeologic interpretation from existing geologic mapping, well records, and water-level and water chemistry data from this project	November 2010
Seasonal fluctuations in ground-water levels will be used for ground-water analysis	November 2010
Data from all sources will be collected, assembled and delivered for analysis	May 2009 through October 2010
Analysis of all data will be included in final report, and final invoice will be submitted with final reports	November-December 2010

SNC PROJECT COSTS

PROJECT BUDGET CATEGORIES	**TOTAL SNC FUNDING**
INCLUDE COSTS FOR STAFF, TASKS, DELIVERABLES AND PROJECT PERFORMANCE MEASURES	□□□□□
Limnology Studies	178,600
Hydrology Studies	130,800
Analysis and Reports by Hydrologist	10,000
Project Performance Measures and reporting	10,000
Support from other sources	(103,300)
Total Project Cost	$432,700
Less support from other sources	-103,300
SNC GRANT TOTAL	**$329,400**